

ABSTRACT

WAFER CELL FOR IMMERSION LITHOGRAPHY

An apparatus, system and method for use with a photolithographic system. In accordance with one embodiment, the photolithographic system of the present invention includes a workpiece support member for supporting a semiconductor wafer. A substantially transparent cover member is disposed over the workpiece support member to form a substantially enclosed workpiece cell therebetween. The enclosed workpiece cell is filled with a first immersion fluid having suitable refractive properties. The cover member, having suitable refractive properties, includes an upper surface contoured to form an open reservoir containing a second immersion fluid, having suitable refractive properties, and in which a final lens element may be immersed during a lithography process.